

**FACT SHEET  
URANIUM MINE DEWATERING STUDY**

- I. Purpose. - To study the effects of past, present and future  $U_3O_8$  mine dewatering on and near the reservation to determine the effect of such activity on the reservation's water resources both surface and underground.

II. Work to be performed.

1. Compile existing data.
2. Locate past, present and potential future withdrawals within a 60 mile radius of the northern boundary of the Pueblo and project the quantity of withdrawals at each point. Calculate the reduction of spring and surface water output based upon the withdrawals.
3. With a computer model, analyze the effects fo  $U_3O_8$  mine dewatering and  $U_3O_8$  mill tailings disposal on the water resource base. The analysis shall be of the effect on quantity and quality of the Pueblo's water resource base.
4. Establish an ongoing monitoring system to monitor the effects of  $U_3O_8$  mine dewatering on the reservation water resource base.

III. Specific work items.

1. Compile existing data.
2. Evaluate the west water and jackpile formations to a 60 mile radius of the northern boundary of the Pueblo including:
  - a. A study of the hydrology of the geologic formations.
  - b. Construction of a computer model to account for potential withdrawals and forecast water level decline and spring flow reduction for the following points in time:
    - i) 1950
    - ii) 1980
    - iii) 2000
    - iv) 2030
  - c. Identify the steady-state of the Jurassic system.
  - d. Estimate reduction and spring flow and other drainages due to mine dewatering for the following periods:
    - i) 1980
    - ii) 2000
    - iii) 2030



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3. Determine original quantity and quality of the Pueblo water resources. Evaluate present drawdown and future impacts of  $U_3O_8$  mining and milling on or near the reservation on the water resources. Locate areas of pollution by tailing pond seepage into stream and groundwater.
4. Ongoing water quantity and quality monitoring program.
  - a. Establish data points for continued monitoring.
  - b. Evaluate cost and benefits of establishing additional data points, i.e., drilling new wells or deepening existing wells.
  - c. Establish a training program for the ongoing monitoring program.